

REMARKS

Reconsideration and further examination are requested.

Disposition of the Claims

33 claims have been presented during prosecution.

Claims 1-13, 21, & 24-25 were canceled without prejudice or disclaimer.

Claims 31-33 are new. They should be joined with the elected group for reasons that should be readily apparent *vide infra*.

Claims 14-20, 22-23, & 26-33 are pending in the application.

Claims 14-18, 20, & 26-30 are withdrawn from consideration.

Claims 19 & 22-23 are rejected.

Claim 19 is currently amended, without prejudice or disclaimer.

Support for each amended or new claim is found in the as-filed specification and stated below.

This amendment adds, changes and/or deletes one or more claims in this application. A detailed listing of each claim that is, or was, in the application, irrespective of whether or not the claim remains under examination in the application, is presented, with a status identifier.

Anticipation rejection

Claim 19 was rejected as anticipated by Noguchi. (USAPN 2002/0117392). FOA, paras. 1-3 & 12-13. A reference cannot anticipate what is does not describe. Here, Noguchi fails to describe an embodiment falling within the scope of the rejected claim. Thus, the rejection should be withdrawn.

Specifically, claim 19 recites the following, which further contains mapping to show exemplary support for the amendment language from the specification:

19. (Currently amended) A wastewater treatment apparatus that treats a wastewater containing capable of removing persistent substances such as COD components contained in a wastewater produced and discharged in a gas purification process of a gasification facility comprising: /see, e.g., specification

at para. 21}

...

wherein the ultraviolet treatment unit comprises:

a pump that feeds an oxidized water oxidized in the wastewater treatment bath;

a reaction bath that receives the oxidized water fed from the pump; and

an ultraviolet lamp that is provided above the reaction bath and irradiates an ultraviolet ray toward the oxidized water in the reaction bath to decompose the COD components in the oxidized water. (see, e.g., specification at paras. 45-47 & 69-74; Figs. 14-15)

On the other hand, Noguchi fails to describe an embodiment having these features and thus an embodiment falling within the scope of the rejected claim. Thus, the rejection should be withdrawn.

Regarding the new claims, claim 31 parallels claim 19 and is written in a format that acknowledges the Examiner's comments about the pH being distinct from the apparatus. FOA, para. 13. Although the undersigned asks the Examiner to read the claim himself, the undersigned directs the Examiner to a difference between claim 19 and 31, namely, while claim 19 recites *an ultraviolet lamp that is provided above the reaction bath and irradiates an ultraviolet ray toward the oxidized water*, claim 31 recites *an ultraviolet lamp that irradiates an ultraviolet ray toward the oxidized water*. (emphasis added for highlighting a difference). Support is in the specification at paras. 45-47 & 69-74; Figs. 14-15. Noguchi fails to describe an embodiment having these features, and thus Noguchi fails to describe an embodiment falling within the scope of claim 31 or its dependent claims 32-33. Thus, no rejection should be made against claims 31-33.

Obviousness rejection

Claims 22-23 were rejected as obvious over the teachings of Noguchi. FOA, paras. 4-13. Obviousness is determined in view of the *Graham* factors, several of which are in dispute here. For example, as noted above, Noguchi fails to describe an embodiment falling within the scope of the rejected claim. Nor does Noguchi teach or suggest such features highlighted above. Thus, the rejection cannot make out a *prima facie* case of obviousness and should be withdrawn.

An embodiment of claim 19 makes it possible for COD components of the gasified wastewater to be effectively treated by combining oxidization by adding an oxidizing reagent and decomposition of organic materials through an advanced oxidation process using a combination of ultraviolet light and an oxidizing reagent. Noguchi is silent in this regard.

Similarly, new claims 31-33 are patentable for analogous reasons. Thus, for analogous reasons, a *prima facie* case of obviousness cannot be made, and no rejection should be made against claims 31-33.

Conclusion

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,
LOWE HAUPTMAN HAM & BERNER, LLP

Benjamin J. Hauptman
Registration No. 29,310

Customer Number: 22429
1700 Diagonal Road, Suite 300
Alexandria, Virginia 22314
(703) 684-1111
(703) 518-5499 Facsimile
Date: February 15, 2011
BJH/SAP:tpr